

### **REMARKS**

Claims 1 to 23 and 25 to 43 are before the Examiner. Claim 24 has been cancelled and Claim 43 has been added. Claims 1, 3, 18, 19, 25 to 29, 31, 36 and 42 have been amended. Claim 18 has been amended to include aspects of cancelled claim 24 and to broaden other aspects of the claim. The non-narrowing amendments to claims 1, 3, 19, 25 to 29, 31, 36 and 42 largely correct typographical errors or make other cosmetic changes. New claim 43 includes part of the subject matter of former claim 18. The Examiner's remarks in the Office Action with respect to claims 1 to 42 are addressed below.

#### **35 U.S.C. 112**

The Examiner has rejected claims 1 to 17 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and claim the subject matter which applicant regards as the invention. In particular, there is no punctuation mark at the end of line 3 of claim 1. Although this does not render the claim legally indefinite, claim 1 has been amended to include a punctuation mark at the end of line 3 to expedite prosecution.

#### **35 U.S.C. 103(a)**

The Examiner includes a paragraph at pages 2-3 of the Office Action that states that this application currently names joint inventors. Applicant submits that this application names only one inventor, John Philipson.

The Examiner has rejected claims 1-8, 10-32 and 34-42 under 35 U.S.C. 103(a) as being unpatentable over Howard *et al.* (British Patent No. 1,286,532) combined with Schultz (U.S. Patent No. 5,431,702) and Benson *et al.* (U.S. Patent No. 5,429,645). The Examiner asserts that Howard teaches combustible pellets and method for producing combustible pellets (see page 1, lines 21-39 and 57-81 and claims 1 and 2), wherein coal is further added to the fuel composition and the pellets have a 11,000 BTU per pound heating value. The Examiner asserts, however, that Howard is silent to the teaching of the less than 10% by weight water content, fuel value of 12,000 to 14,000

BTU per pound, the dimension of the pellet, and an anaerobic digestion step following the separation and recyclable steps.

The Examiner also asserts that Benson teaches pellets and a method for producing the pellet comprising an anaerobic digestion step, column 4, lines 12-48 to produce high energy residue having a heat value at 8500 to 10,500 BTU per pound, abstract, column 8, lines 35-41, Fig. 7 and claims 1 to 10 and BTU values from 9,500-18,000, note Fig. 5, column 3, lines 12-17. Benson does not teach or suggest a combustible pellet comprising a water content of less than 10% by weight and a fuel value of at least 10,000 BTU. In Fig. 7, it is shown that RDF-5 has a heating value of only 7500-8000 BTU with a water content of 5-7% by weight. A pellet having less than 10% by weight water content only achieved a 7500-8000 BTU fuel value. Benson may teach the production of higher heating values at column 4, lines 21-24, but does not teach the combination of the lower water content (i.e. less than 10% by weight water) with the higher heating values. Furthermore, there is no motivation to combine the teachings of Benson and Hanson, since Benson does not teach or suggest that a pellet having less than 10% by weight can ever achieve greater than a 7500-8000 BTU fuel value.

The Examiner further asserts that Schultz teaches briquettes of cylinder shape, column 5, line 36, having a dimension of 2 x 0.25 x 2.25, column 5, lines 50-52, the pellet having a water content of about 10 weight %, Example 7, that render obvious the 1-7% wt. water of the instant claims, note also the pellet having 10-12% wt. water at column 3, lines 35-37 and claims 24 and 7. Schultz does not teach or suggest a combustible pellet comprising a water content of less than 10% by weight. Schultz teaches pellets having about 10% by weight water content and greater, as noted by the Examiner. Furthermore, Schultz does not teach or suggest a combustible pellet comprising a water content of less than 10% by weight and a fuel value of at least 10,000 BTU. Schultz does not provide any BTU values with respect to its pellets. Therefore, even if there were motivation to combine the teachings of Schultz with the teachings of Benson and Hanson, Schultz does not teach a pellet having a water content of less than 10% by weight.

The Examiner asserts that it would have been obvious to one skilled in the art to use MSW having the moisture content, BTU values, and derived with the use of an anaerobic digestion step to produce pellets of the shape and dimensions of Benson and Schultz to render obvious the instant claims. As discussed above, there is no motivation to combine the teachings of Hanson, Benson and Schultz. Hanson teaches pellets having a fuel value of 11,000 BTU and does not teach or suggest the water content of the claimed pellet. Benson does not teach or suggest that a pellet having less than 10% by weight can ever achieve greater than a 7500-8000 BTU fuel value. Therefore, there is no motivation to combine Hanson and Benson to provide the claimed invention. Schultz teaches pellets having about 10% by weight water content and greater, and does not provide any fuel values. Therefore, Schultz does not add any further teachings to the combination of Hanson and Benson. Hanson, Benson and Schultz, neither singly nor in combination, teach or suggest a pellet having a water content of less than 10% by weight and a fuel value of at least 10,000 BTU per pound.

The Examiner also asserts that it would have been obvious to one skilled in the art to use digestion gas, e.g., methane of Benson, as a fuel to drive a gas-fuel turbine engine because turbines require fuel of high quality, free of impurities as the methane gas to render claim 22 obvious and to use the gas to dry the waste to aid in the recycle of the fuel gas to render obvious claim 23. Benson does not teach or suggest utilizing the gas in this manner.

The Examiner has rejected claims 9 and 33 under 35 U.S.C. 103(a) as being unpatentable over Howard *et al.* (British Patent No. 1,286,532) combined with Schultz (U.S. Patent No. 5,431,702) and Benson *et al.* (U.S. Patent No. 5,429,645) as applied to claims 1-8, 10-32 and 34-42 above, and further in view of Chieffalo *et al.* (U.S. Patent No. 5,779,164). The Examiner asserts that Howard combined with Benson and Schultz are silent to the teachings of the claimed emissions produced during combustion of the claimed pellet. The Examiner further asserts, however, that Chieffalo teaches a method for producing MSW and MSW products having relative proportions of particulate matter, cadmium, lead, mercury, dioxin/furan, hydrochloric acid, sulfur dioxide and nitrogen oxides in ranges that overlap and/or encompass the ranges of claims 9 and 33.

As discussed above, Hanson, Benson and Schultz, neither singly nor in combination, teach or suggest a pellet having a water content of less than 10% by weight and a fuel value of at least 10,000 BTU per pound. Therefore, combining the teachings of Chieffalo with the teachings of these references would not provide a pellet having a water content of less than 10% by weight, a fuel value of at least 10,000 BTU per pound, as well as the specific emissions of claims 9 and 33.

Furthermore, with respect to the myriad of combinations of prior art that has been cited, it is respectfully submitted that "hindsight" is being used in determining obviousness. The Supreme Court has frequently warned against the use of "hindsight" in determining obviousness (see for example *Diamond Rubber Co. v. Consolidated Rubber Tire Co.*, 220 U.S. 428 (1911)). As noted in *re Mahurkar Patent Litigation* (1993) 831 F. Supp. 1354, 28 U.S. PQ 2d 180 (N.D. ILL. 1993.), Judge Easterbrook noted that "decomposing an invention into its constituent elements, finding each element in the prior art, and then claiming that it is easy to reassemble these elements into the invention, is a forbidden ex post analysis". The Examiner is using the present invention, as claimed, as a template in order to piece together the teachings of the prior art to render the claims obvious. It is impermissible to use the disclosure of the present invention as a "road map" for selecting and combining prior art disclosures. As stated in *In re Wesslau* 353 F. 2d 238, 147 U.S. PQ 391 (CCPA 1965), the Court of Customs and Patent Appeals cautioned that "it is impermissible within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art". For instance, Benson does not teach or suggest that a pellet having less than 10% by weight can ever achieve greater than a 7500-8000 BTU fuel value.

Based on these submissions, the Applicant respectfully request withdrawal of the rejection of the present claims.

**Conclusion**

For the reasons given above, Applicant respectfully requests reconsideration of this application and timely allowance of the pending claims. Applicant submits that the pending claims are in condition for allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-3848.

Respectfully submitted,

Perkins Coie LLP



---

Edward S. Hotchkiss  
Registration No. 33,904

**Correspondence Address:**

Customer No. 25096  
Perkins Coie LLP  
P.O. Box 1247  
Seattle, Washington 98111-1247  
(206) 359-8000